

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0068420; AI 33872; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** U.S. Liquids of La, L.P.
Bourg Facility
P.O. Box 1467
Jennings, LA 70546
- II. PREPARED BY:** Angela Marse
- DATE PREPARED:** June 7, 2010
- III. PERMIT ACTION:** reissue LPDES permit LA0068420, AI 33872; PER20090001
- LPDES application received: August 4, 2009
LPDES permit issued: February 1, 2005
LPDES permit expired: January 31, 2010

IV. FACILITY INFORMATION:

- A. The application is for the discharge of stormwater from outside of land treatment cells from a commercial oilfield exploration and production waste treatment and disposal facility.
- B. The facility is located at 843 Bourg-Larose Hwy. (La. Hwy. 24) in Bourg, Lafourche Parish.
- C. Stormwater is settled in a retention pond. Aeration and chlorine disinfection are used to treat sanitary wastewater. Sanitary wastewater is discharged directly to a field bed and not included in this permit.

D. Outfall 002

Discharge location: Latitude 29° 32' 59" North
Longitude 90° 31' 22" West

Description: Stormwater from access roads, non-process areas, office and maintenance shop areas, and runoff from reuse material stockpiles

Expected Flow: 2.42 MGD

Type of Flow Measurement which the facility is currently using: pump curve

V. RECEIVING WATERS:

The discharge is into the St. Louis Canal in subsegment 120604 of the Terrebonne Basin.

Statement of Basis

LA0068420; AI 33872; PER20090001

Page 2

The designated uses and degree of support for Segment 120604 of the Terrebonne Basin are as indicated in the table below^{1/}:

| Degree of Support of Each Use | | | | | | |
|-------------------------------|------------------------------|--------------------------------|------------------------------------|-----------------------|------------------------|-------------|
| Primary Contact Recreation | Secondary Contact Recreation | Propagation of Fish & Wildlife | Outstanding Natural Resource Water | Drinking Water Supply | Shell fish Propagation | Agriculture |
| Full | Full | Not Supported | N/A | N/A | N/A | N/A |

^{1/}The designated uses and degree of support for Segment 120604 of the Terrebonne Basin are taken from LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 120604 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

Statement of Basis

LA0068420; AI 33872; PER20090001

Page 3

For additional information, contact:

Mrs. Angela Marse
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Final Effluent Limits:****OUTFALL 002****Total Maximum Daily Load (TMDL) Studies**

Section 303 (d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. TMDLs for subsegment 120604 of the Terrebonne Basin are complete. However, subsegment 120604 of the Terrebonne Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of the impairment are TDS and non-native aquatic plants. The sources of these impairments are unknown. EPA will complete a TMDL for TDS; other measures will be utilized to control non-native aquatic plants. The draft permit will contain a TDS reporting requirement to continue gathering data for this facility.

The following TMDL has been established for subsegment 120604:

TMDLs for Dissolved Oxygen and Nutrients in Selected Subsegments in the Middle Terrebonne Basin, March 2008. The TMDL utilized oxygen demanding parameters (BOD specifically) in LPDES permits to identify point sources. A cumulative wasteload allocation was determined and distributed among the point sources. The Bourg Facility was not included in the TMDL. They do not have a BOD limit in their LPDES permit; they discharge only stormwater and discharges are intermittent.

Facility Operations

The facility receives exploration and production (E&P) wastes from oil and gas companies. The wastes, except for saltwater and completion fluids, are placed in treatment cells. (Saltwater and completion fluids are placed in storage tanks and then injected through permitted saltwater injection wells.) E&P wastes solids are placed in treatment cells and go through a treatment process that includes dewatering, desalinization, and hydrocarbon degradation. The La. Department of Natural Resources has established treatment criteria for these waste solids. Once the waste solids in the treatment cell meet these criteria, they are tested for reuse criteria. When reuse criteria is met, treatment is complete and solids can be removed. The waste solids are used for on-site construction or are stored in reuse stockpiles. The treatment cells are used for a new application and treatment cycle once the solids are removed. Stormwater collected in the treatment cells during treatment is injected with saltwater into the injection wells.

Although Centralized Waste Treatment Regulations found at 40 CFR Part 437 have a subpart for oil waste, these regulations are not applicable to land application sites. Thus, these regulations are not applicable to US Liquids. As per LAC 33.IX.708.C there shall be no unpermitted discharge of waste oil, produced water, drilling fluids, drill cuttings, or other wastes, nor any uncontrolled discharges of wastewater, including stormwater runoff, from exploration and production sites. US Liquids Bourg site is a treatment facility for exploration and production waste, not an exploration and production site regulated under 40 CFR 435 (Oil and Gas Extraction Point Sources). The discharge of non-contact stormwater from outside process areas is authorized by the permit as well as stormwater runoff from

Statement of Basis

LA0068420; AI 33872; PER20090001

Page 4

reuse stockpiles that have met DNR reuse criteria. Besides an LDPES permit, US Liquids maintains a Spill Prevention Control and Countermeasure Plan as well as a Stormwater Pollution Prevention Plan.

The previous permit allowed for the discharge of non-contact stormwater from outside the treatment cells whenever the water quality of the accumulated stormwater met the effluent discharge limitations. Non-contact stormwater is stormwater that falls outside of cells in areas such as roads, reuse material stockpiles, and the facility's perimeter levee. The permittee has requested a reduction in monitoring frequency. For monthly parameters, the permittee has requested quarterly. For weekly parameters, the permittee has requested monthly monitoring. A DMR review from January, 2007 through December, 2009 indicated the permittee only discharged on nine occasions and therefore was only required to sample for nine occasions (approximately 3-4 times per year). Because of the nature of the operations (E&P wastes treatment and disposal), public interest, and limited discharge events, this Office will not reduce the monitoring frequency at this time.

Since the previous permit was issued, several changes have occurred at the facility. However, none of them will change the permit. USLL received a wetland permit (through Corps of Engineers) to construct Reuse Stockpile #4. The stockpile will be contained within a perimeter berm. Stormwater will be either collected and discharged or directed to the retention pond for injection. A mechanical desalinization process has been added to the site to boost the removal of salts in the treatment cell solids. The entire process is located in the treatment cell levees. This reduces treatment time. Effluent from this process is injected into saltwater wells. Several cells have been closed meaning they are no longer in use or have been converted to another use. Cell #1 has been closed and is now part of reuse stockpile #1; Cell #2 is closed and revegetated, Cells #11 and 12 are in closure.

Effluent limits are based on the previous permit and prior NPDES permit. Toxic priority pollutants (phenol, benzene, toluene, ethylbenzene) are taken from the Organics Chemicals and Plastics and Synthetic Fibers Guidelines (40 CFR Part 414, Subpart I) and EPA Region VI BAT Metal Guidelines. Because no specific guidelines have been developed for this industry since issuance of the previous permit, the effluent limits will remain the same.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

| Effluent Characteristic | Monthly Avg. | Daily Max. | Basis |
|-------------------------|--------------|-------------|--|
| COD | --- | 100 mg/l | BPJ based on the facility's previous permit effluent limitations and previously issued water discharge permits for similar facilities/effluents. |
| TSS | --- | 60 mg/l | BPJ based on the facility's previous permit effluent limitations and previously issued water discharge permits for similar facilities/effluents. |
| Oil and Grease | --- | 15 mg/l | BPJ based on the facility's previous permit effluent limitations and previously issued water discharge permits for similar facilities/effluents. |
| TDS | --- | Report mg/l | BPJ based on the facility's previous permit and previously issued water discharge permits for similar facilities/effluents. |
| Chlorides | --- | 500 mg/l | BPJ based on the facility's previous permit effluent limitations and previously issued water discharge permits for similar facilities/effluents. |

Statement of Basis

LA0068420; AI 33872; PER20090001

Page 5

| Effluent Characteristic | Monthly Avg. | Daily Max. | Basis |
|-------------------------|--------------|--------------|---|
| Sulfates | --- | Report mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents. |
| Total Phenol | --- | 0.026 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and Organics Chemicals and Plastics and Synthetic Fibers Guidelines (40 CFR Part 414, Subpart I). |
| Benzene | --- | 0.05236 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and Organics Chemicals and Plastics and Synthetic Fibers Guidelines (40 CFR Part 414, Subpart I). |
| Ethylbenzene | --- | 0.108 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and Organics Chemicals and Plastics and Synthetic Fibers Guidelines (40 CFR Part 414, Subpart I). |
| Toluene | --- | 0.08 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and Organics Chemicals and Plastics and Synthetic Fibers Guidelines (40 CFR Part 414, Subpart I). |
| Antimony | --- | 0.549 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Arsenic | --- | 0.137 mg/l | BPJ based on the facility's previous permit effluent limitations and previously issued water discharge permits for similar facilities/effluents. |
| Beryllium | --- | 0.275 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Cadmium | --- | 0.2439 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Hexavalent Chromium | --- | 0.0796 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Total Chromium | --- | 0.343 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |

Statement of Basis

LA0068420, AI 33872, PER20090001

Page 6

| Effluent Characteristic | Monthly Avg. | Daily Max. | Basis |
|-------------------------|--------------|--------------|--|
| Copper | --- | 0.5712 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Lead | --- | 0.275 mg/l | BPJ based on the facility's previous permit effluent limitations and previously issued water discharge permits for similar facilities/effluents. |
| Mercury | --- | 0.00083 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Nickel | --- | 0.549 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Selenium | --- | 0.11 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Silver | --- | 0.11 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Thallium | --- | 0.549 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |
| Zinc | --- | 0.686 mg/l | BPJ based on previously issued water discharge permits for similar facilities/effluents and EPA Region VI Metal Guidelines. |

Other Effluent Limitations:**1) pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

2) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

3) Visible Sheen

No evidence or presence of a sheen shall be observed in the effluent discharge.

Statement of Basis

LA0068420; AI 33872; PER20090001

Page 7

X. PREVIOUS PERMITS:

LPDES Permit No. LA0068420: Issued: February 1, 2005
Expired: January 31, 2010

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | <u>Monitoring Requirements</u> | |
|--------------------------------|------------------------------|-------------------|--------------------------------|--------------------|
| | <u>Monthly Avg.</u> | <u>Daily Avg.</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| Flow | Report | Report | 1/day | Measure |
| COD | --- | 100mg/l | 1/day | Grab |
| TSS | --- | 60 mg/l | 1/week | Grab |
| Oil and grease | --- | 15 mg/l | 1/week | Grab |
| TDS | --- | Report mg/l | 1/week | Grab |
| Chlorides | --- | 500 mg/l | 1/week | Grab |
| Sulfates | --- | Report mg/l | 1/week | Grab |
| Total phenol | --- | 0.026 mg/l | 1/month | Grab |
| Benzene | --- | 0.05236 mg/l | 1/month | Grab |
| Ethylbenzene | --- | 0.108 mg/l | 1/month | Grab |
| Toluene | --- | 0.08 mg/l | 1/month | Grab |
| Antimony | --- | 0.549 mg/l | 1/month | Grab |
| Arsenic | --- | 0.137 mg/l | 1/month | Grab |
| Beryllium | --- | 0.275 mg/l | 1/month | Grab |
| Cadmium | --- | 0.2439 mg/l | 1/month | Grab |
| Hexavalent Chromium | --- | 0.0796 mg/l | 1/month | Grab |
| Total Chromium | --- | 0.343 mg/l | 1/month | Grab |
| Copper | --- | 0.5712 mg/l | 1/month | Grab |
| Lead | --- | 0.275 mg/l | 1/month | Grab |
| Mercury | --- | 0.00083 mg/l | 1/month | Grab |
| Nickel | --- | 0.549 mg/l | 1/month | Grab |
| Selenium | --- | 0.11 mg/l | 1/month | Grab |
| Silver | --- | 0.11 mg/l | 1/month | Grab |
| Thallium | --- | 0.549 mg/l | 1/month | Grab |
| Zinc | --- | 0.686 mg/l | 1/month | Grab |
| pH | 6.0 (min) | 9.0 (max) | 1/day | Grab |

The permit contains stormwater pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following inspections were performed for the facility.

Facility Inspection, October 11, 2008 EDMS Document No. 38244056.

Facility Inspection, February 22, 2007 EDMS Document No. 35828473.

B) Compliance and/or Administrative Orders

A review of the files indicates that no recent enforcement actions have been administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 2008 through December 2009 has revealed no violations.

Statement of Basis

LA0068420; AI 33872; PER20090001

Page 8

D) Company Compliance History

There are no open enforcement actions for US Liquids of La, LP for the permits listed in the application.

XII. ADDITIONAL INFORMATION:**Reopener Clause**

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Monitoring Frequency Requirements

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are the same as the previous permit.

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2009.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2009.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations,

Statement of Basis

LA0068420; AI 33872; PER20090001

Page 9

Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2009.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, US Liquids, Bourg Facility, August 4, 2009.